

 Site Boundary



0 1,050 2,100 4,200 ft
1:24,000 1 inch equals 2,000 feet

EXHIBIT 2: USGS TOPOGRAPHIC MAP MEADOWOOD | COUNTY OF SAN DIEGO, CALIFORNIA



Natural Resource Consultants

September 9, 2008

Ms. Sandy Marquez
Recovery Permit Coordinator
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road
Carlsbad, California 92011

SUBJECT: Results of presence/absence surveys for the least Bell's vireo (*Vireo bellii pusillus*) and southwestern willow flycatcher (*Empidonax traillii extimus*) at Meadowood off-site improvement locations, in the vicinity of the Community of Fallbrook, San Diego County, California.

Dear Ms. Marquez:

Natural Resource Consultants (NRC) was retained by Pardee Homes to conduct focused surveys for the federally endangered least Bell's vireo (*Vireo bellii pusillus*) and southwestern willow flycatcher (*Empidonax traillii extimus*) at designated off-site improvement locations associated with the approximately 400-acre Meadowood site, located in the vicinity of the Community of Fallbrook, San Diego County, California.

The purpose of NRC's surveys was to determine the presence or absence of least Bell's vireo (LBV) and southwestern willow flycatcher (SWF) on the site using the U.S. Fish and Wildlife Service protocol survey methods for these species (USFWS, 2001). A total of at least five LBV were recorded during this survey, but no SWF. This report provides the methods, results and conclusions of NRC's surveys conducted between April 23 and July 9, 2008.

SITE LOCATION AND DESCRIPTION

The proposed Meadowood project site (the site) is located in the north-central portion of San Diego County, California. It is adjacent to and east of Interstate 15 (I-15), and north of State Route 76 / Pala Road, which runs more or less parallel with the San Luis Rey River, a short distance further to the south (Exhibit 1). The site is accessed along a dirt road proceeding north from Pala Road, and several other dirt roads provide access to other portions of the site.

The designated survey areas were accessed from a dirt road proceeding north of the paved terminus of Pankey Road to the north of State Route 76 (SR-76).

The majority of the site is situated within the U.S. Geological Survey (USGS) 7.5-Minute *Bonsall* Quadrangle, in Sections 36, Township 9 South (Exhibit 2). A smaller portion is situated within Section 10, Township 10 South, all within Range 3 West. The site is wider in the northern portion, becoming very narrow to the south. The site and vicinity can also be found in the 2007 Thomas Guide for San Diego County, Detail Map Page 1048, Map Coordinate J-1, and Map Page 1029, Map Coordinates A-6 to A-7.

An off-site improvement for a proposed road extension passes through riparian vegetation in the Horse Ranch Creek drainage. The LBV and SWF survey areas were situated to the south and west of the proposed Meadowood site along the Horse Ranch Creek drainage.

The Meadowood site supports up to ten vegetation communities within its boundaries: undisturbed and disturbed Riversidean coastal sage scrub, southern mixed chaparral, coast live oak woodland, southern willow scrub, willow and mule fat scrub, non-native grassland, scattered and isolated ponded water and freshwater marsh, and agriculture, consisting mostly of citrus and avocado orchards. There is also a series of disturbed/ruderal lands and a network of mostly roads providing access into the orchards and elsewhere around the site.

PLANT COMMUNITIES AND PLANT SPECIES

The designated survey areas supported southern willow scrub bordered by willow and mule fat scrub, together comprising riparian vegetation, as well as fence pastures, low and sparse coastal sage scrub, non-native grassland, and mostly un-vegetated disturbed/ruderal areas. The southern willow scrub that was visited during the LBV and SWF surveys occur, from south to north, along Horse Ranch Creek between the bridge at the end of Pala Mesa Drive to the SR-76. This vegetation varied in width from as narrow as 15 to 20 feet wide along parts of Horse Ranch Creek, to greater than 100 feet wide in the northern survey area. These are generally undisturbed by human activity except in small portions where previous filling, plant disturbance, and refuse disposal has taken place.

The dominant plants consisted of willows (*Salix lasiolepis*, *S. gooddingii*, and *S. exigua*) and mule fat (*Baccharis salicifolia*) that were generally mature and robust with some natural openings and varied heights of these plants. Associated species included blue elderberry (*Sambucus mexicanus*), poison-oak (*Toxicodendron diversilobum*), poison hemlock (*Conium maculatum*), Douglas' mugwort (*Artemisia douglasiana*), coyote brush (*Baccharis pilularis*), water-cress (*Rorippa nasturtium-aquaticum*), coast live oak (*Quercus agrifolia*), gum tree (*Eucalyptus* sp.), California evening-primrose (*Oenothera elata*), Fremont's cottonwood (*Populus fremontii*), curly dock (*Rumex crispus*), tamarisk (*Tamarix* sp.), hoary nettle (*Urtica dioica*), desert grape (*Vitis girdiana*) and cattail (*Typha latifolia*).

SURVEY METHODS

Surveys to determine presence/absence of least Bell's vireo and southwestern willow flycatcher are regulated by the U. S. Fish and Wildlife Service (USFWS). For the vireo, the USFWS requires a minimum of eight surveys conducted by a qualified biologist at least 10 days apart during the breeding season, April 10 to July 31. A maximum of 3 linear kilometers of suitable vireo habitat may be surveyed by one person in any one day. Surveys are to be conducted in the morning between sunrise and 11:00 am; however, when temperatures are excessively cool or hot, or the weather is inclement, surveys are to be suspended.

For the flycatcher, the USFWS recommends surveys to be conducted according to the following schedule: at least one survey between May 15 and May 31, at least one survey between June 1 and June 21, and three surveys between June 22 and July 17, at minimum of five days apart. Surveys are to be conducted in the morning between sunrise and 11:00 am.

The surveys for LBV and SWF were performed were performed by biologist Robert Bates (TE-154963-0) during the 2008 survey season according to guidelines issued by the USFWS. Biologists Eric Kline and Marcus England also assisted on the LBV surveys. Eight vireo surveys were conducted in accordance with Service guidelines between 23 April and 9 July 2008. Six SWF surveys were conducted between May 14 and June 9, 2008. The dates, hours, and weather conditions for each survey are provided in Table 1.

All areas were surveyed on foot by walking slowly through or adjacent to suitable habitat, stopping periodically, with special attention given to detecting the vireos and flycatcher by their distinctive calls and/or songs, and observing them visually when possible.

**TABLE I. LEAST BELL'S VIREO AND SOUTHWESTERN WILLOW FLYCATCHER
SURVEY DATES, TIMES, AND WEATHER CONDITIONS.**

Date	Time	Biologist(s)	Weather Conditions	Survey
23 April 2008	0900 – 1105	RB, EK, ME	Partly cloudy, calm, 60's to 70's	LBV survey #1
5 May 2008	0855 - 1100	EK	Overcast, light breeze, 50's to 60's	LBV survey #2
14 May 2008	0800 - 1050	RB	Mostly cloudy, light breeze SW, 60's to 70's	LBV survey #3 / SWF survey #1
28 May 2008	0600 - 0900	RB	Overcast to mostly cloudy, calm, 60's to 70's	LBV survey #4 / SWF survey #2
5 June 2008	0600 - 0900	RB	Overcast to mostly cloudy, calm, 50's to 60's	LBV survey #5 / SWF survey #3
17 June 2008	0600 - 0900	RB, EK	Mostly cloudy, light breeze W, 60's to 70's	LBV survey #6 / SWF survey #4
26 June 2008	0600 - 0900	RB	Mostly cloudy, light breeze W, 60's to 70's	LBV survey #7 / SWF survey #5
9 July 2008	0600 - 0900	RB	Overcast to mostly cloudy, calm, 60's to 70's	LBV survey #8 / SWF survey #6

RB – Robert Bates, EK – Eric Kline, ME – Marcus England

RESULTS AND DISCUSSION

A minimum of five territorial LBV were recorded in survey areas during the 2008 survey (Exhibit 3). No SWF were recorded. The vireo locations and dates of detection are described below.

On April 23, 2008 two LBV were observed in the Horse Ranch Creek drainage. One was located in the northern portion of the drainage and one was observed adjacent to the Pankey Road bridge. No nesting LBV or pairs were observed. No SWF were observed.

On May 5, 2008 five LBV were observed throughout the western edge of the Horse Ranch Creek drainage. Two of the birds appeared to be a pair, but no nesting was observed. No SWF were observed.

On May 14, 2008 one LBV was observed in the northern portion of the survey area along Horse Ranch Creek. No SWF were observed.

On May 28, 2008 no LBV or SWF were observed.

On June 5, 2008 two LBV were detected near the western edge of riparian woodland. No nesting LBV or pairs were observed. No SWF were observed.

On June 17, 2008 three LBV were observed in the northern portion of the survey area and near the Pankey Road bridge. No nesting LBV or pairs were observed. No SWF were observed.

On June 26, 2008 two LBV were observed along the Horse Ranch Creek drainage. No nesting or pairs were observed.

On July 9, 2008 two LBV were observed along the Horse Ranch Creek drainage. No nesting or pairs were observed.

During the surveys, occurrences of brown-headed cowbirds (*Molothrus ater*), a nest-parasite known to seek out LBV nests to deposit their eggs, were noted whenever they were encountered.

CERTIFICATION

I certify that the information in this survey report and attached exhibits fully and accurately represents my work.

_____ Signature	TE 154963-0 Permit #	_____ Date
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_____ Signature	_____ Permit #	_____ Date
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_____ Signature	_____ Permit #	_____ Date
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If you have any questions or comments regarding this letter, please contact me directly at 949.497.0931.

Sincerely,

NATURAL RESOURCE CONSULTANTS

Attachments

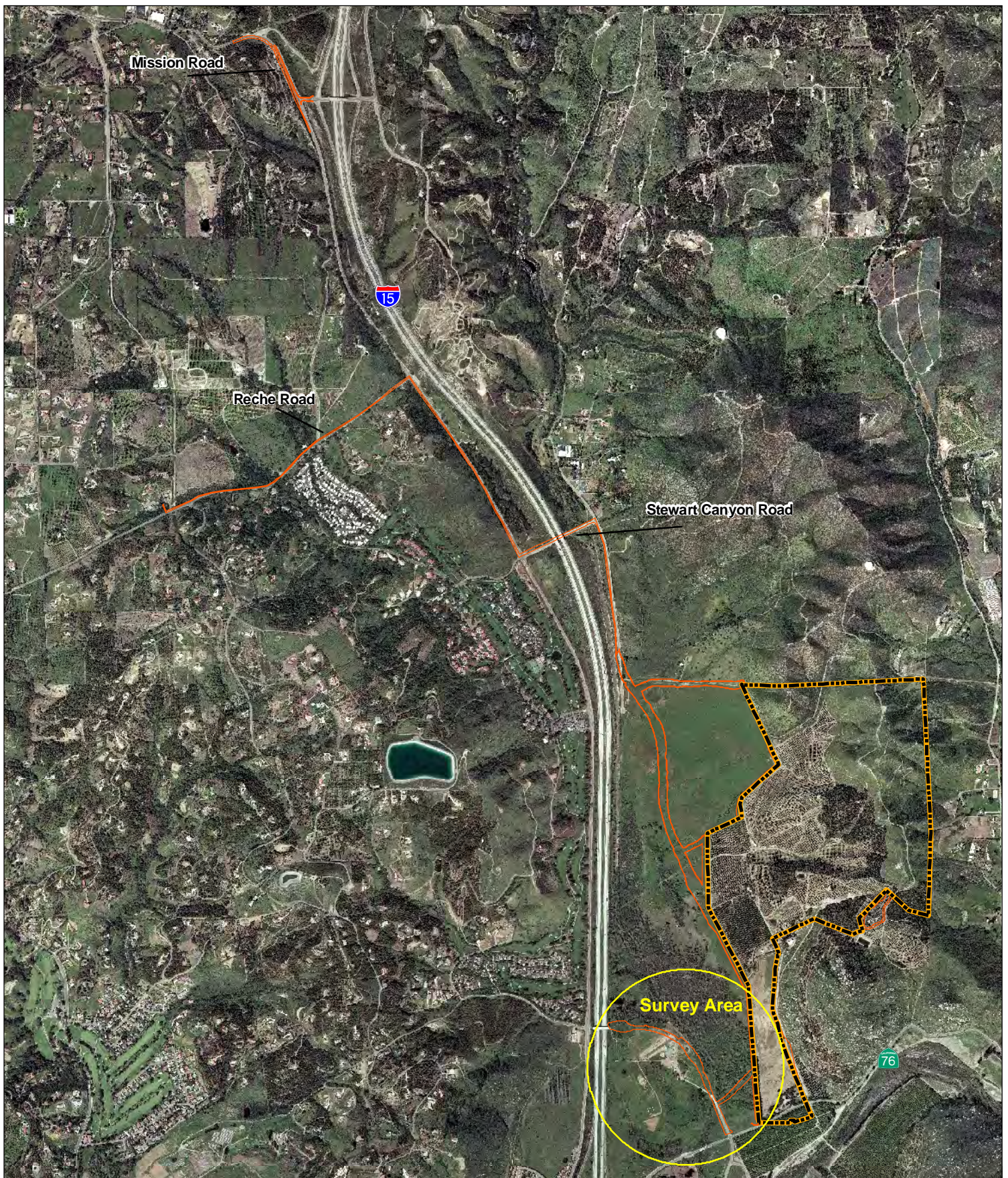
- Exhibit 1: Site Map
- Exhibit 2: USGS Topographic Map
- Exhibit 3: Survey Area

LITERATURE CITED



U. S. Fish and Wildlife Service. 2001. *Least Bell's Vireo survey guidelines*. Unpubl. report, Carlsbad Field Office, Carlsbad, California.

U. S. Fish and Wildlife Service. 2000. *Southwestern Willow Flycatchers survey guidelines*. Unpubl. report, Carlsbad Field Office, Carlsbad, California.

The Thomas Guide. 2007. San Diego County Map Book. Rand McNally, Skokie, Illinois.



Eric Kline, Natural Resource Consultants, 27 August 2008, Proj_GIS/pardes/meadowood/workspaces/2008/LBV_site_map.mxd

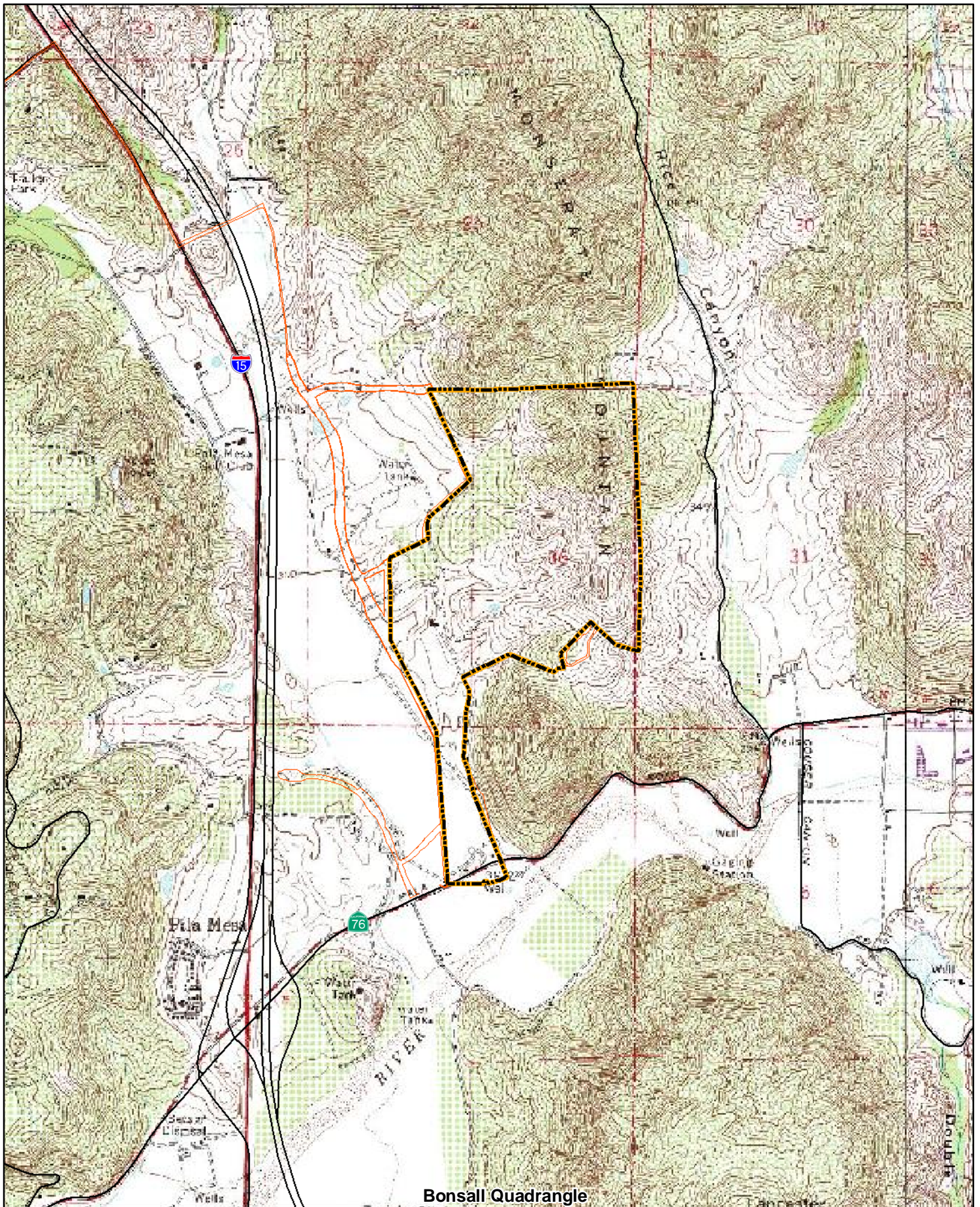
 Meadowood Site Boundary
 Offsite Improvement Areas





0 1,250 2,500 5,000
ft
1:27,764 1 inch equals 2,314 feet

EXHIBIT 1: SITE MAP MEADOWOOD | SAN DIEGO COUNTY, CALIFORNIA





 Site Boundary
 Offsite Improvement Areas

Eric Kline, Natural Resource Consultants, 21 Aug. 2008 Proj_GIS/parde/meadowood/2008/USGS_topo.mxd

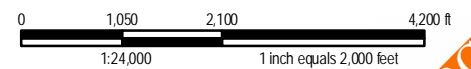
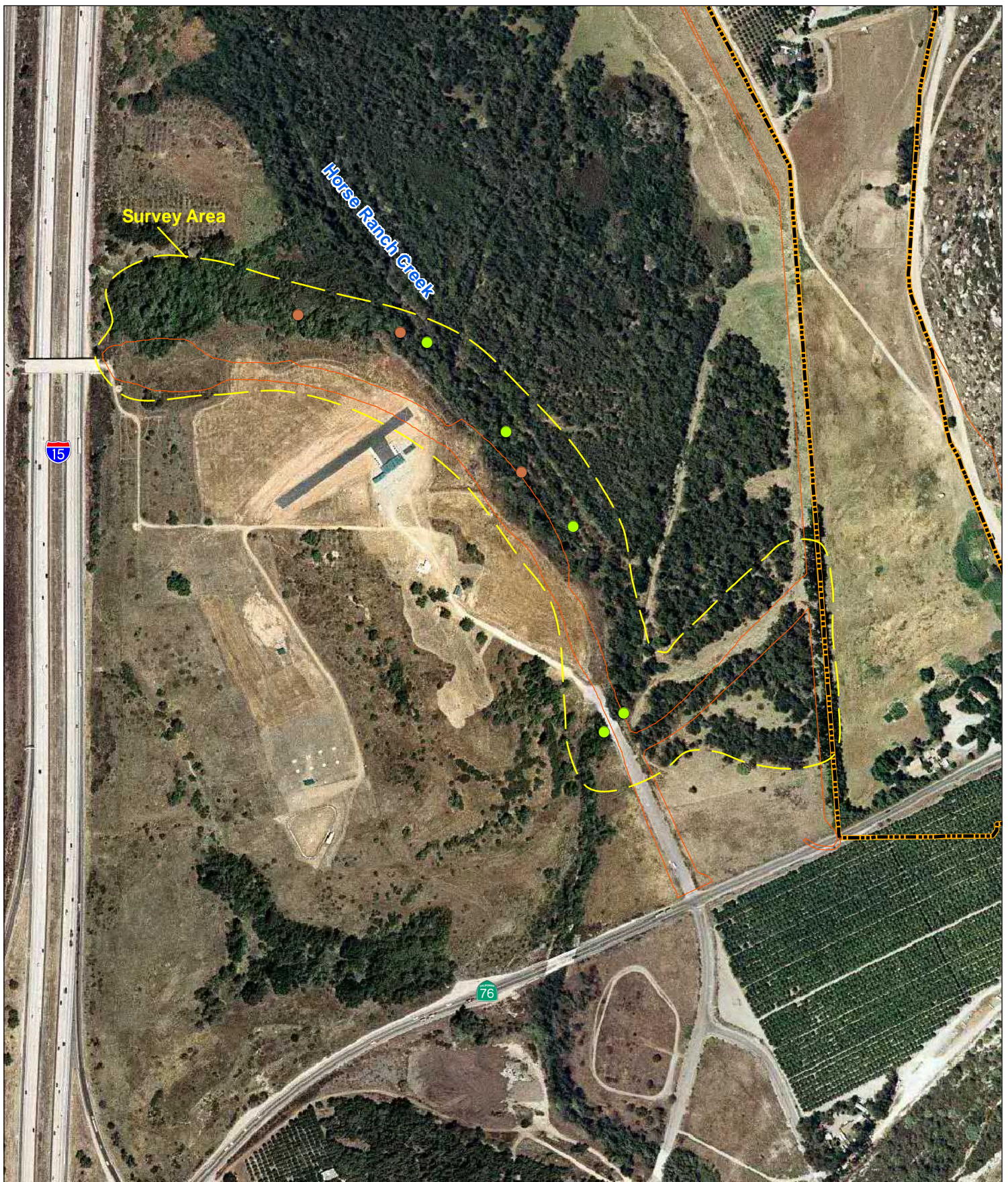


EXHIBIT 2: USGS TOPOGRAPHIC MAP

MEADOWOOD | COUNTY OF SAN DIEGO, CALIFORNIA





Eric Kline, Natural Resource Consultants, 9 September 2008. Proj_GIS\pardee\meadowood\workspaces\2008\LBV_survey.mxd

-  Meadowood Site Boundary
-  Offsite Improvement Areas
-  Least Bell's Vireo
-  Brown-headed Cowbird

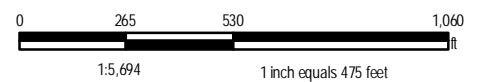


EXHIBIT 3: SURVEY AREA MEADOWOOD | SAN DIEGO COUNTY, CALIFORNIA

